ABSTRACT OF THE DISCLOSURE

It is made possible to concretely estimate actual transmission bit rate in a frame of grasping a line state by using a report packet.

Together with media packets encoded by a video encoder 1 and an audio encoder 2, a sender report packet generated by a sender report generation section 3 is sent to the transmission line. A receiver report packet is fed back from the receiver side. Each of the sender report packet and the receiver report packet includes report packets of two kinds differing in size. A rate estimation section 4 estimates transmission bit rate on the basis of round-trip delay time for the sender report packet and the receiver report packet each having a small size and round-trip delay time for the sender report packet and the receiver report packet each having a large size.